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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/066,732	02/06/2002	Kyung Hee Lee	123056-05004484	4087

43569 7590 08/25/2005

MAYER, BROWN, ROWE & MAW LLP  
1909 K STREET, N.W.  
WASHINGTON, DC 20006

EXAMINER
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MICHALSKI, JUSTIN I

ART UNIT	PAPER NUMBER
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2644

DATE MAILED: 08/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/066,732	<b>Applicant(s)</b> LEE ET AL.	
	<b>Examiner</b> Justin Michalski	<b>Art Unit</b> 2644	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 February 2002.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5 and 8 is/are rejected.
- 7) ☒ Claim(s) 4, 6, 7 and 9-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Objections*

1. Claim 3 is objected to because of the following informalities: In line 3, "no the audio data" is unclear. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 2, 3, 5, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suito et al. (Hereinafter "Suito") (US Patent 6,925,340) in view of Kim (US Patent 6,094,490).

Regarding Claims 1 and 8 Suito discloses a method and apparatus for controlling audio noise attenuation by monitoring a buffer, the apparatus including a loudspeaker reproducing an audio signal, the apparatus comprising: audio data storing means for storing audio data to be reproduced (Output buffer 24); D/A converting means for converting the audio data stored in the storing means to an analog signal (D/A converter 25). Suito does not disclose switching, time setting, and output control means. Kim discloses switching means for switching between a audio signal and a loudspeaker according to a switching control signal (Fig. 4, noise gate 70); time setting means for setting a time until the audio data stored in the storing means is completely outputted

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and outputting a timer flag signal according to variation of the set time (comparator 50, comparator 60 and counter 54); and output control means for outputting a switching control signal to the switching means according to a time flag signal outputted from the time setting means and a user flag signal set by a user (signals from 50 and 60). Kim discloses prevention of noise when a signal less than a prescribed level is outputted (i.e. completely outputted) (paragraph bridging Columns 1 and 2). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use switching, time setting, and control means for preventing noise as taught by Kim.

Regarding Claim 2, Kim further discloses the switching means is a switching element (noise gate 70).

Regarding Claim 3, Kim further discloses the time setting means generates the time flag signal if the audio data to be outputted is in the storing means, and does not generate the timer flag if no audio data is in the storing means (paragraph bridging columns 2 and 3).

Regarding Claim 5, Suito et al. further discloses a plurality of data buffers which are identical in size thereof, each of the data buffers storing the audio data having a same size as the others (Fig. 15b); a head pointer indicating on the data buffers which stores the oldest data, and output the audio data stored corresponding the D/A converting means (output pointer); and a tail pointer indicating one of the data buffers which stores the latest data (input pointer).

***Allowable Subject Matter***

4. Claims 3-7 and 9-11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Werrback (5,334,947) discloses a logic enhanced noise gate.

Lee (5,247,582) discloses prevention of noise at time of no signal.

Fiori, Jr. (5,664,022) discloses noise gate control circuitry.


6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin Michalski whose telephone number is (571)272-7524. The examiner can normally be reached on M-F 7-3:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on (571)272-7848. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JIM

  
August 18, 2005

  
**VIVIAN CHIN**  
**SUPERVISORY PATENT EXAMINER**  
**TECHNOLOGY CENTER 2600**